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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,769	07/17/2003	John Richard Boylan	06256P USA	1707

23543 7590 09/30/2005

AIR PRODUCTS AND CHEMICALS, INC.  
PATENT DEPARTMENT  
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ALLENTOWN, PA 181951501

EXAMINER
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SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/621,769

Applicant(s)

BOYLAN, JOHN RICHARD

Examiner

Lynda M. Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 11/18/04, 7/17/03.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I claims 1-8 in the reply filed on 7/13/05 is acknowledged. Claims 9-24 have been canceled as requested.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2-8 are rejected for their dependency on claim 1.

4. Claim 1 is indefinite because it is not clear to the Examiner if Applicant is claiming a blend coating composition or a substrate having a coating of the claimed blend. Applicant recites the limitation of "when" applied as a coating, but also recites specific limitations to the desired substrate. The recitation of "when" is not a positive limitation and thus for purposes of examination claim 1 will be treated as drawn to the composition blend rather than the coated substrate.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being obvious over GB patent specification 876,226 in view of Swarup et al., US 6, 476,136.

The published GB specification teaches a fibrous coating composition comprising a blend of wax emulsion and polymer emulsion (title and column 2, 55-60). With regard to claims 5 and 6, the GB specification teaches a wax polymer ratio of about 30 weight percent wax emulsion and 70 weight percent polymer emulsion (page 5, examples VI-IX). With regard to claim 8, the GB specification teaches a wax blend comprising paraffin and polyethylene wax (page 5, example II).

The published GB specification fails to teach the claimed polymer composition, however, the patent issued to Swarup et al., teach a polymer emulsion composition comprising the claimed vinyl ester of a neo-acid and an alkyl ester of an acrylic acid or methacrylic acid (abstract, title, and column 4, 13-50). With regard to the weight percentages of the neo acid and the acrylic or methacrylic acid, Swarup et al., teach a polymer composition comprising between about 5-70 weight percent of vinyl neo acid and between about 30-95 weight percent of acrylic or methacrylic acid (claim 9). Swarup et al., specifically teach that the polymer emulsion composition can be incorporated into coating formulations applied to fabrics (column 4, 55-67). Swarup et al., teach that the polymer composition provides improved performance properties such as water, stain and alkali hydrolysis resistance (column 1, 15-65).

Therefore, motivated by the desire to provide a textile fabric with improved properties such as water and stain resistance, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate the wax-polymer emulsion textile coating

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composition taught in the published GB specification with the specific polymer blend taught by Swarup et al.

With specific regard to claims 4 and 7, the combination of prior art does not specifically teach the claimed hydrostatic head and the glass transition temperature of the polymer emulsion; however, it is reasonable to presume that the claimed properties are inherent to the invention provided by the cited combination of prior art. Support for said presumption is found in the use of like materials such as the claimed wax emulsion and polymer emulsion constituents and the use of like processes such as applying the coating to textile fabrics. Applicant is invited to evidence otherwise.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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